

2 March 2009

EU – Republic of Korea New Scientific Collaboration Agreement Signed

A Collaboration Agreement signed today between the European Commission's Joint Research Centre (Institute for Reference Materials and Measurements) and the Korea Research Institute of Standards and Science (KRISS) aims to advance measurement science and foster greater confidence in the comparability of international measurements. Areas covered will range from bioanalysis (DNA measurements) and radionuclide metrology (environmental measurements), to food control and mechanical testing (e.g. toughness of steel).

Speaking at the signing ceremony, Dr. Alejandro Herrero, Director of the JRC's Institute for Reference Materials and Measurements, commented: "In the EU, an estimated €80bn is spent on measurements annually. From structural tests of building materials to patient's blood tests in our hospitals, accurate measurements are the foundation for global trade and a better quality of life. This agreement will enable European and Korean measurement scientists to coordinate their research into new and difficult areas, such as bioanalysis and food control."

Dr. Myungsoo Kim, President of KRISS, added, "Metrology has become the essential key to underpin the global agenda such as facilitation of trade, safe food, health, environment, and green growth. I am confident that enhanced collaboration between IRMM and KRISS will make a significant contribution to helping secure greater well-being for all through the provision of valuable measurement infrastructure that helps us tackle global problems."

Why is measurement science important?

Up to 40% of EU Directives involve measurements. Most people are familiar with measurement standards for physical units, like the kilogram or the second. However, complex measurements, such as determining what fraction of human proteins function properly, do not have such an accepted global standard. In these cases, reference materials containing a precise level of a certain substance or property are developed and produced by specialised institutions and distributed to laboratories around the world.

JRC-IRMM is one of the world's leading producers of reference materials. Its prime objective is to build confidence in the comparability of measurements by the production and dissemination of internationally accepted quality assurance tools, including reference materials, validated methods, reference measurements, inter-laboratory comparisons, and training. There are only a limited number of research centres around the globe that have the expertise and resources to develop such reference materials, hence it is advantageous that JRC-IRMM coordinate its efforts with leading international counterparts such as KRISS.

What will this agreement mean in practice?

The European Commission's Institute for Reference Materials and Measurements (IRMM) and the Korea Research Institute of Standards and Science (KRISS) will establish a work programme which sets out joint activities such as measurement campaigns and workshops. The areas already identified in the agreement are:

- bioanalysis, such as DNA measurements for new candidate reference materials
- radionuclide metrology, specifically for new candidate reference materials for environmental measurements
- mechanical testing, specifically measurements of impact toughness of steel
- reference materials for food control

IRMM and KRISS will work together to facilitate greater international understanding and acceptance of metrology and standardisation.

Background information

Measured once, accepted everywhere

The Joint Research Centre is a Directorate-General of the European Commission providing independent scientific and technical support to European policy-making. Its Institute for Reference Materials and Measurements (IRMM) promotes a common and reliable European measurement system in support of EU policies. Today JRC-IRMM is one of the world's leading reference material producers, expert adviser in food safety and quality and bioanalysis as well as a valued provider of reference measurement data. The JRC-IRMM also operates four Reference Laboratories on behalf of the European Community: feed additives, heavy metals in food and feed, mycotoxins, and polycyclic aromatic hydrocarbons.

The Korea Research Institute of Standards and Science (KRISS) is the national metrology institute of the Republic of Korea. KRISS has been commissioned to establish the national measurement standards for Korea that are recognised globally, and it carries out a wide range of in-depth R&D activities in measurement standards. KRISS focuses on research projects to support industries, to secure and improve quality of life, and to contribute to green growth with low carbon emissions, which is a global priority. It has been taking the leading role in the metrology community by promoting partnerships with national metrology institutes of developing economies, and by chairing the Asia-Pacific Metrology Programme.

Related links:

- JRC-IRMM: <http://irmm.jrc.ec.europa.eu>
- KRISS: <http://english.kriss.re.kr/>

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